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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,121	11/26/2003	Richard Hasha	MSFT-2936/183202.05	1308
41505	7590	09/02/2005	EXAMINER	
WOODCOCK WASHBURN LLP ONE LIBERTY PLACE - 46TH FLOOR PHILADELPHIA, PA 19103			VU, THONG H	
		ART UNIT	PAPER NUMBER	2142

DATE MAILED: 09/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/723,121	HASHA, RICHARD
	Examiner Thong H. Vu	Art Unit 2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 06 May 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-4 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-4 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

1. Claims 1-4 are pending.

Withdraw Allowance

2. Applicant is advised that the Notice of Allowance mailed 6/08/2005 is vacated. If the issue fee has already been paid, applicant may request a refund or request that the fee be credited to a deposit account. However, applicant may wait until the application is either found allowable or held abandoned. If allowed, upon receipt of a new Notice of Allowance, applicant may request that the previously submitted issue fee be applied. If abandoned, applicant may request refund or credit to a specified Deposit Account.
3. The indicated allowability of claims 1-4 is withdrawn in view of the 101 rejection and Non-responsive of 103 rejection. Applicant makes no arguments why the claims are patentable over the references.

Response to Arguments

4. Applicant's arguments filed 5/06/05 have been fully considered but they are not persuasive.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In claim 1, Mitchell discloses a data structure for a client tracking system, including:

a client tracking server object derived from a server class that provides an implementation of the classes (i.e.: query interface function) that overrides the query interface function of the server class [Mitchell, a client object, col 6 lines 5-22; the implementation of the classes being created, col 6 lines 25-37; the behavior can be overridden, col 14 lines 10-56 et seq; the attachments to sub-fields of sub-fields is kept track, col 16 lines 60-col 17 line 14; object server class, col 36 lines 60-65]. It was clear that the object oriented programming provides the bi-direction communication between client-server, tracking, implementation of the classes and overriding processes; wherein a (phantom) manager object is a data member of the client tracking server class [Mitchell, the attachments to sub-fields is kept track of by keeping a path of field names, col 16 line 60 seq; the right or left side is allowed to be monitor, col 23 lines 18-25; col 31 lines 14-20].

Mitchell taught a client-server system using object oriented programming to create named relations between classes and keep track of the object subfields including the virtual functions of the subclass [Mitchell, virtual functions, col 18 lines 16-22]. However Mitchell does not detail the objects as phantom objects.

A skilled artisan would have motivation to implement the client-server tracking system and found Lang's teaching. Lang discloses a network environment [Lang, the network database server and Web users, col 17 lines 39-51] wherein the monitoring system can comprise two or more components, in which a first component comprises

an x-ray image and calibration phantom that are used to extract and detect bone-related data on the subject, and a second component that receives the data from the first component, conducts data processing on the data and then displays the processed data [Lang, col 19 lines 20-30].

Therefore, it would have been obvious to an ordinary skill in the art at the time of the invention was made to incorporate the technique of monitoring the phantom information over network as taught by Lang into the Mitchell's apparatus in order to utilize the network tracking process. Doing so would provide an efficiency to control or keep track the virtual functions between objects, classes, subclasses in the same program.

Claim Rejections - 35 USC § 101

5. The claimed invention lacks patentable utility. (i.e. the claims is not limited to data structure stored on a computer readable medium).

Claim Objections

6. Claims 2 is objected to under 37 CFR 1.75(c) as being in improper dependent claim. See MPEP § 608.01(n). Accordingly, the claim 2 has not been further treated on the merits. (i.e.: "wherein instead of providing an implementation of the query interface function that overrides the query interface function of the server class" as removing limitation).

Specification

7. Applicant is required to update the copending or related applications informations.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-4 are rejected under the judicially created doctrine of double patenting over claims 1-44 of U. S. Patent No. 6,684,246 B1 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

(‘246) 1. A method in a computer system for tracking access to a server object of a server class by each client, the server object having a query function through which references to interfaces are provided to clients, the method comprising:

providing a phantom server class that includes functions that correspond to the functions of the server class and that have the same signature as the corresponding function of the server class;

providing a phantom manager class that includes a create function for instantiating a phantom server object of the phantom server class and returns a reference to the phantom server object;

providing a client tracking server class that is a derivation of the server class wherein the query function of the client tracking server class invokes the create function of the phantom manager class;

instantiating a client tracking server object; and invoking the query function of the client tracking server object wherein the query function invokes the create function of a phantom manager object which instantiates a phantom server object and wherein the query function returns a reference to the phantom server object.

2. The method of claim 1 wherein functions of the phantom server class forward their invocation to the corresponding functions of the client tracking server class.
3. The method of claim 1 wherein the create function invokes a create instance function of a phantom manager class that instantiates the phantom server object.
4. The method of claim 1 wherein the phantom manager class includes an instance going away function that is invoked when a phantom server object is destructed to perform custom processing for a client.

(Application) 1.A data structure for a client tracking system, including:

a client tracking server object derived from a server class that provides an implementation of a query interface function that overrides the query interface function of the server class, wherein a phantom manager object is a data member of the client tracking server class.

3. (1) a phantom going away function that is invoked by a phantom server object to notify the phantom manager object that the phantom server object is being destructed, (2) a get object pointer function that returns a pointer to an embedding client tracking object, (3) a create function that is invoked by the query interface function of the client tracking server object to create a phantom server object, (4) a get phantom count function that returns the number of phantom server objects currently managed by the phantom manager object, (5) a create instance function that instantiates a phantom server object and that is invoked by the create function and (6) an instance going away function that is invoked by the phantom going away function.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-4 are rejected under 35 U.S.C. § 103 as being unpatentable over Mitchell et al [Mitchell 5,872,973] in view of Lang et al [Lang 6,690,761 B2].

10. As per claim 1, Mitchell discloses a data structure for a client tracking system, including:

a client tracking server object derived from a server class that provides an implementation of the classes (i.e.: query interface function) that overrides the query interface function of the server class [Mitchell, a client object, col 6 lines 5-22; the implementation of the classes being created, col 6 lines 25-37; the behavior can be overridden, col 14 lines 10-56 et seq; the attachments to sub-fields of sub-fields is kept track, col 16 lines 60-col 17 line 14; object server class, col 36 lines 60-65]. It was clear

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that the object oriented programming provides the bi-direction communication between client-server, tracking, implementation of the classes and overriding processes; wherein a (phantom) manager object is a data member of the client tracking server class [Mitchell, the attachments to sub-fields is kept track of by keeping a path of field names, col 16 line 60 seq; the right or left side is allowed to be monitor, col 23 lines 18-25; col 31 lines 14-20].

Mitchell taught a client-server system using object oriented programming to create named relations between classes and keep track of the object subfields including the virtual functions of the subclass [Mitchell, virtual functions, col 18 lines 16-22]. However Mitchell does not detail the objects as phantom objects.

A skilled artisan would have motivation to implement the client-server tracking system and found Lang's teaching. Lang discloses a network environment [Lang, the network database server and Web users, col 17 lines 39-51] wherein the monitoring system can comprise two or more components, in which a first component comprises an x-ray image and calibration phantom that are used to extract and detect bone-related data on the subject, and a second component that receives the data from the first component, conducts data processing on the data and then displays the processed data [Lang, col 19 lines 20-30].

Therefore, it would have been obvious to an ordinary skill in the art at the time of the invention was made to incorporate the technique of monitoring the phantom information over network as taught by Lang into the Mitchell's apparatus in order to

utilize the network tracking process. Doing so would provide an efficiency to control the virtual functions between objects in the same program.

11. As per claim 2, Mitchell-Lang disclose instead of providing an implementation of the query interface function that overrides the query interface function of the server class, the client tracking server object provides an alternative implementation of the query interface function wherein if the query interface function invokes another function according to convention, then the other function is overridden as inherent feature of the query interface and override functions.

12. As per claim 3, Mitchell-Lang disclose the phantom manager class of the phantom manager object inherits from a base phantom manager class that includes at least one of (1) a phantom going away function that is invoked by a phantom server object to notify the phantom manager object that the phantom server object is being destructed, [Mitchell, invoking a function, col 15 lines 21-34] (2) a get object pointer function that returns a pointer to an embedding client tracking object, [Lang, embedded statement, col 17 lines 25-37] (3) a create function that is invoked by the query interface function of the client tracking server object to create a phantom server object, [Mitchell, a function is called to create an instance, col 11 lines 5-18] (4) a get phantom count function that returns the number of phantom server objects currently managed by the phantom manager object, [Mitchell, a function will return a newly created instance of any object, col 31 lines 45-54]; (5) a create instance function that instantiates a phantom

server object and that is invoked by the create function [Mitchell, invoking a function, col 15 lines 21-34] and (6) an instance going away function that is invoked by the phantom going away function [Mitchell, invoking a function, col 15 lines 21-34].

13. As per claim 4, Mitchell-Lang disclose the phantom manager class of the phantom manager object inherits from a base phantom manager class that includes at least one of (1) a my list pointer data member that provides a pointer to phantom server objects managed by the phantom manager object, (2) a my object pointer data member that provides a pointer to a client tracking server object in which the phantom manager object is embedded and (3) a my count data member that provides a count indicative of the number of phantom server objects managed by the phantom manager object as inherent feature of using a list members [Mitchell, a list of members, col 14 lines 10-31].

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thong Vu*, whose telephone number is (571)-272-3904. The examiner can normally be reached on Monday-Thursday from 8:00AM- 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Andrew Caldwell*, can be reached at (571) 272-3868. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval IPAIRI system. Status information for published applications may be obtained from either Private PMR or Public PMR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thong Vu
Patent Examiner
Art Unit 2142

